A scenic view of Boulder, Colorado, featuring a large circular inset showing a mountain peak and the text "Boulder Colorado". The background image shows a wide view of the city with various buildings, including a prominent one with green and white striped awnings, and a large mountain range in the distance under a clear blue sky. The circular inset provides a closer look at a specific mountain peak, with the text "Boulder Colorado" overlaid in white.

# Boulder Colorado



## Existing Context

- Prosperous small town of 100,000
- Highly educated population
- Diverse economic base - universities, federal research labs, tech startups, “silicon valley” of organic foods
- Consistently rated one of the best places in the United States to live, work, or play
- Internationally known for progressive land use planning, open space preservation, dual use greenways/floodways
- Arid climate
- Steep elevation gradient to the west

**100 RESILIENT CITIES**

# Risk Profile

Results from March 2015 Resilient Boulder mini-workshop  
Incorporating analysis of hazard mitigation plans and April 2014 workshop feedback



## **High risks**

Drought

Floods

Pandemic flu

Wildfire

Winter storms

## **Medium risks**

Dam failure

Extreme temperatures

Infrastructure/building failure

Hazardous materials accident

## **Top stresses linked to shocks**

Environmental degradation

Transportation options

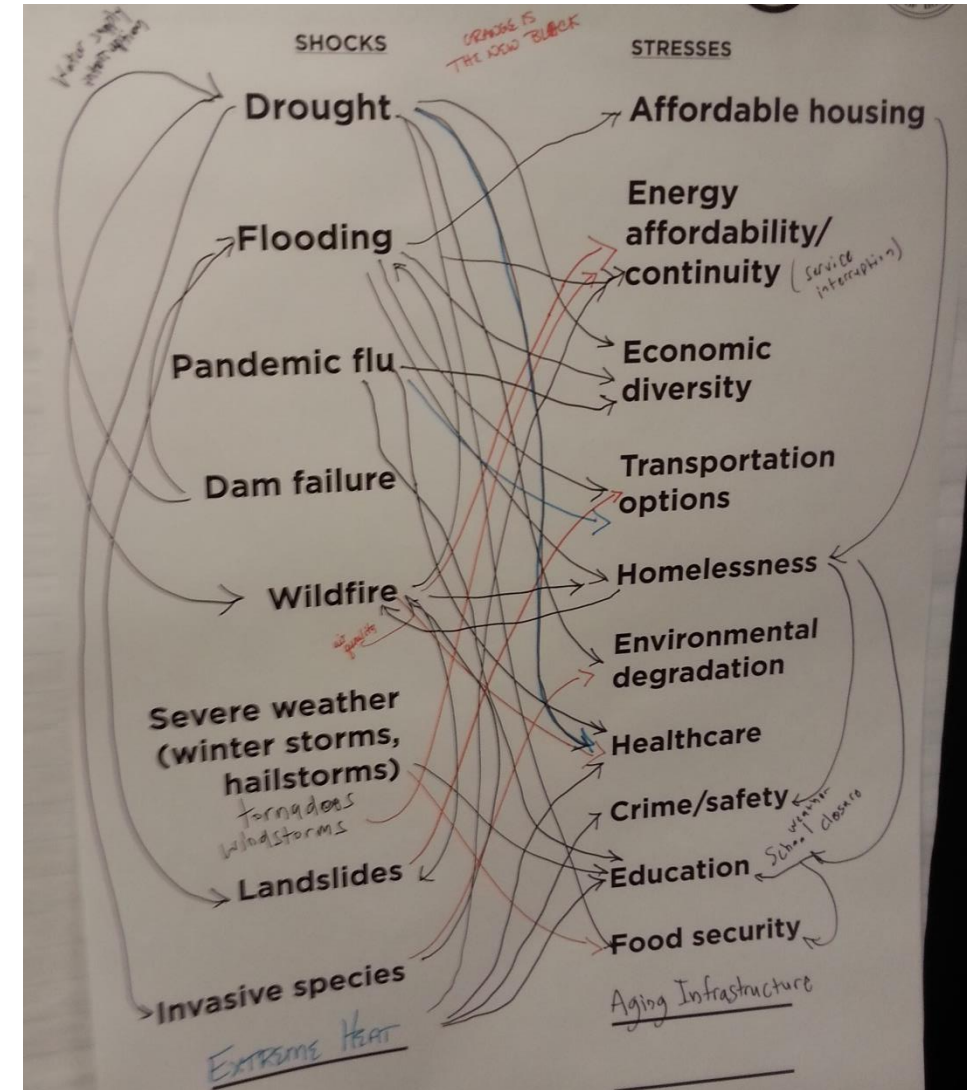
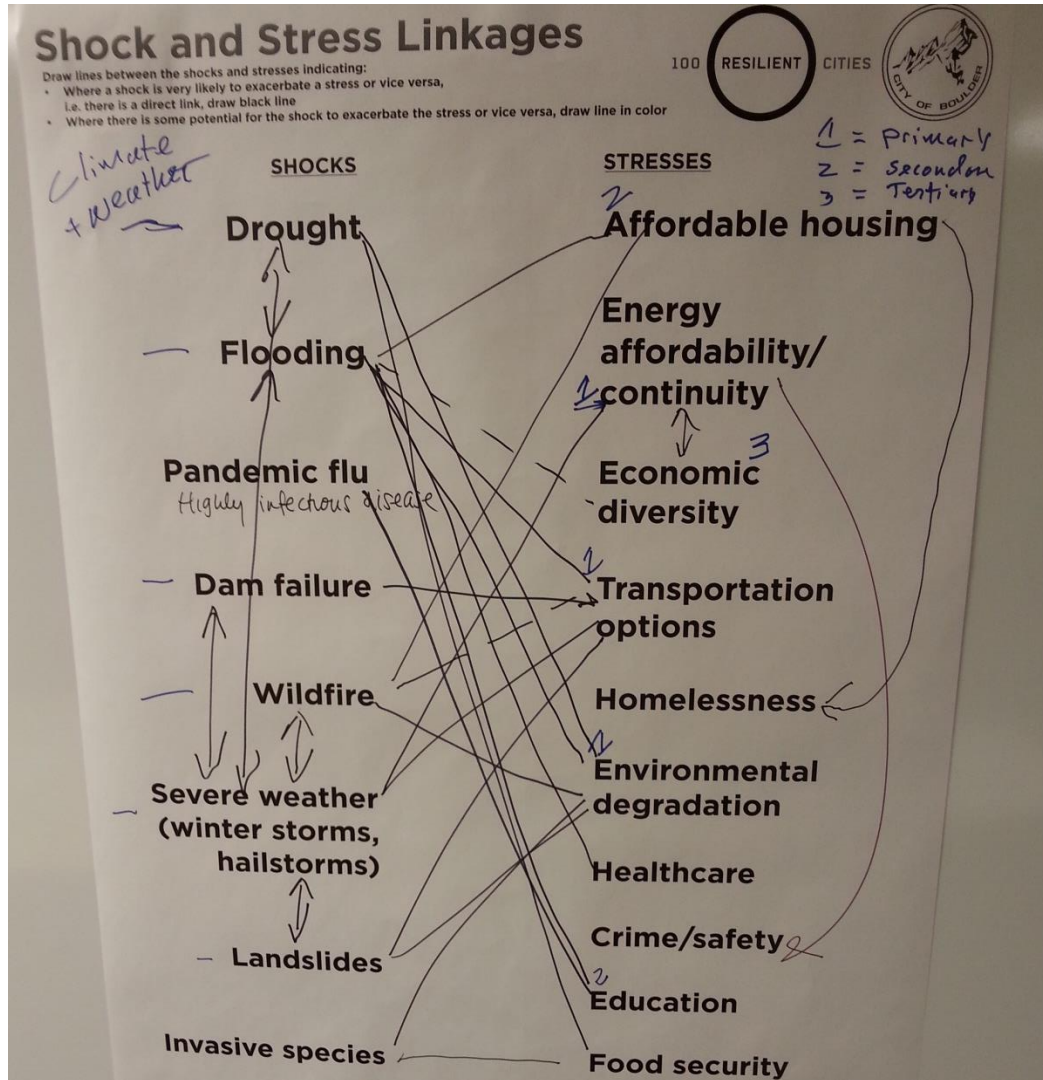
Energy affordability/continuity

Economic diversity

Housing affordability

# Interrelationship of Risk

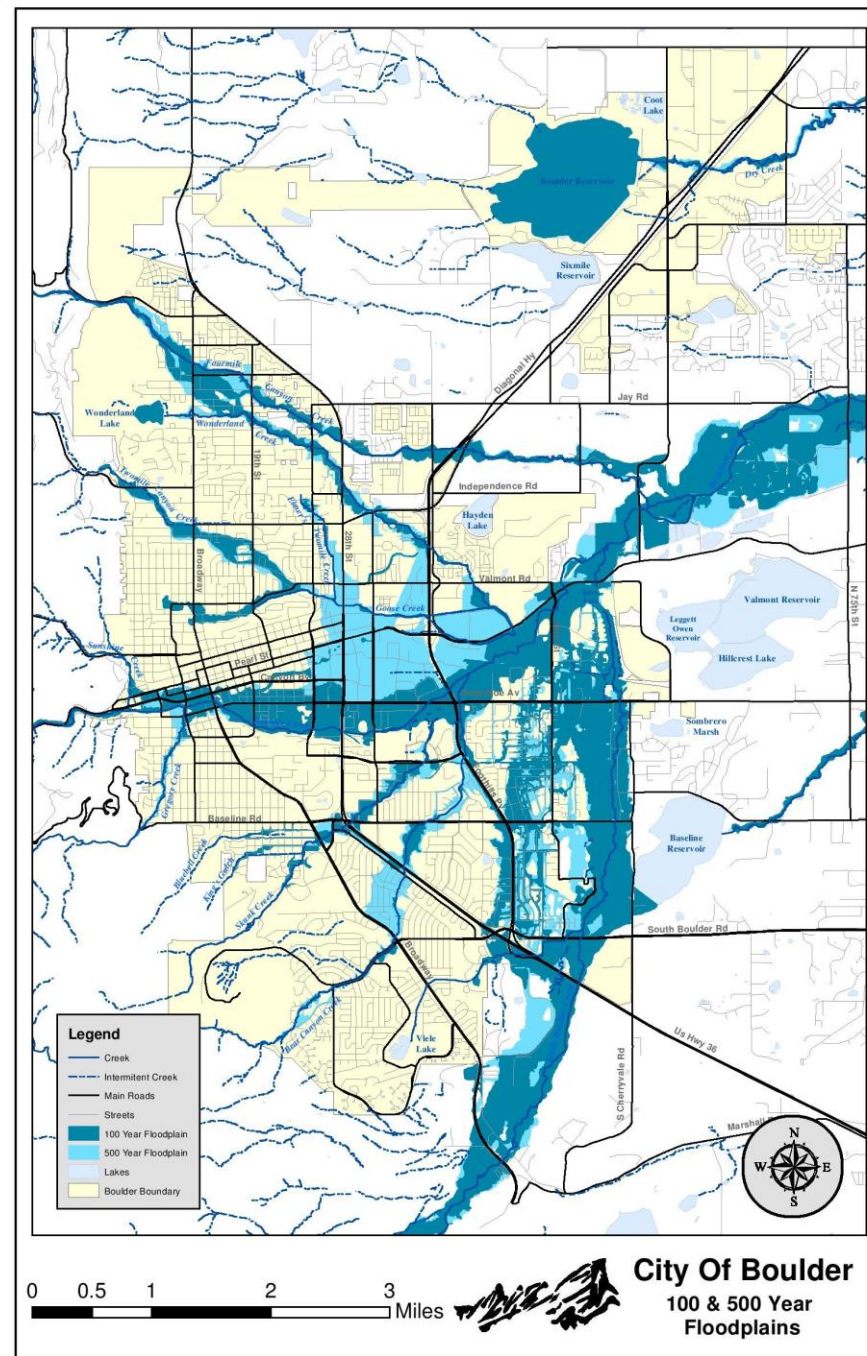
Results from March 2015 Resilient Boulder mini-workshop  
Incorporating analysis of hazard mitigation plans and April 2014 workshop feedback





## 2013 Flood

- 8 days of rain, nearly the average annual total - 18"
- 1000 year precipitation event but only a 100 year flood event
- Access to mountain communities was severed along 6 of 7 canyons
- \$300million in private property damage, \$27million in municipal property, only \$14million is reimbursable
- Not a flash flood or the event we were preparing for
- Preceded by major wildfires in 2010 and 2011



## 2013 Flood #2

- Green infrastructure is vital but not reimbursable!
- Ground water intrusion was completely unexpected
- Role of the open space boundary in transportation fragility, mutual aid, and major shock trauma care
- Need for flexible municipal staffing and financial mechanisms
- Reinforcement of core principles: know your neighbor, have a plan, know your risk
- Rapid public burn out and return to complacency



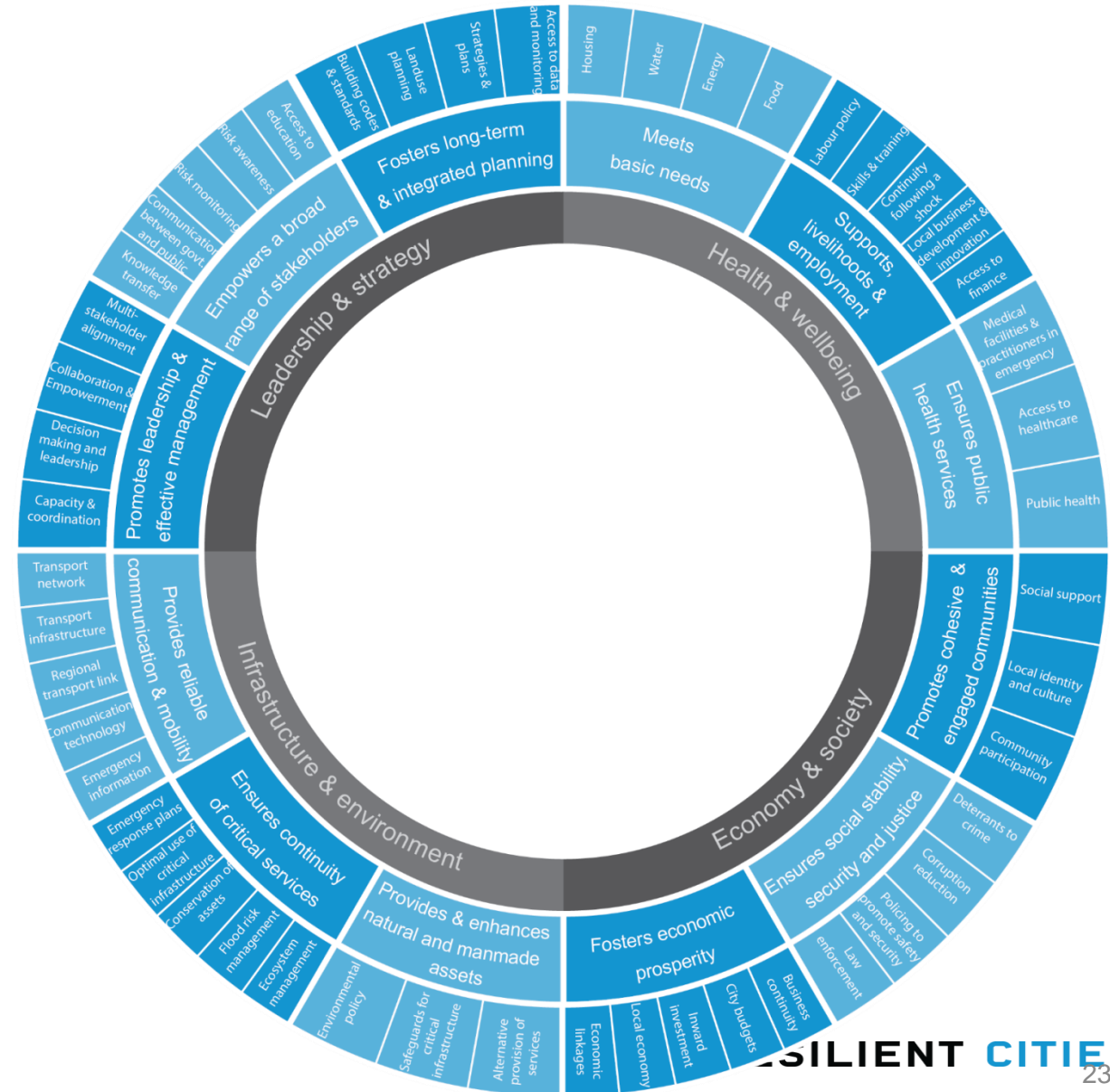
## Resilience Planning in Boulder

- Building on a legacy of 30+ years of progressive land use planning and floodplain management
- Expanding the concept to include more social and economic dimensions of risk and vulnerability
- Incorporating resilience principles into the 2015 update of the Boulder Valley Comprehensive Plan and the Human Services Master Plan
- Producing a 'Resilience Strategy' as part of the Rockefeller Foundation's 100 Resilient Cities Global Campaign

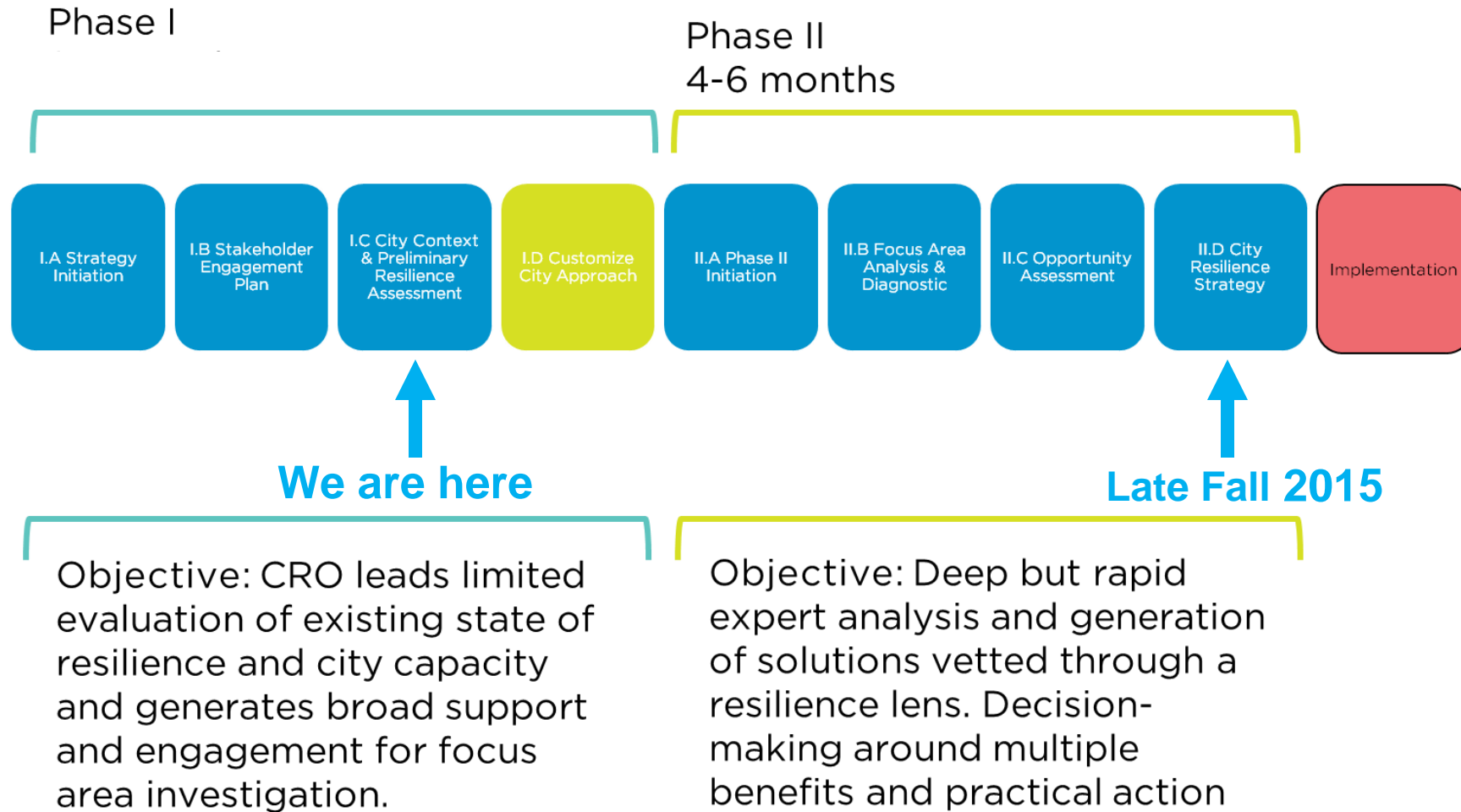
# Preliminary Resilience Assessment

## City Resilience Framework

These drivers are comprised of **50 indicators**, 3-5 for each driver. We used a condensed list of these indicators to gauge Boulder's resilience through the Preliminary Resilience Assessment.



# Timeline

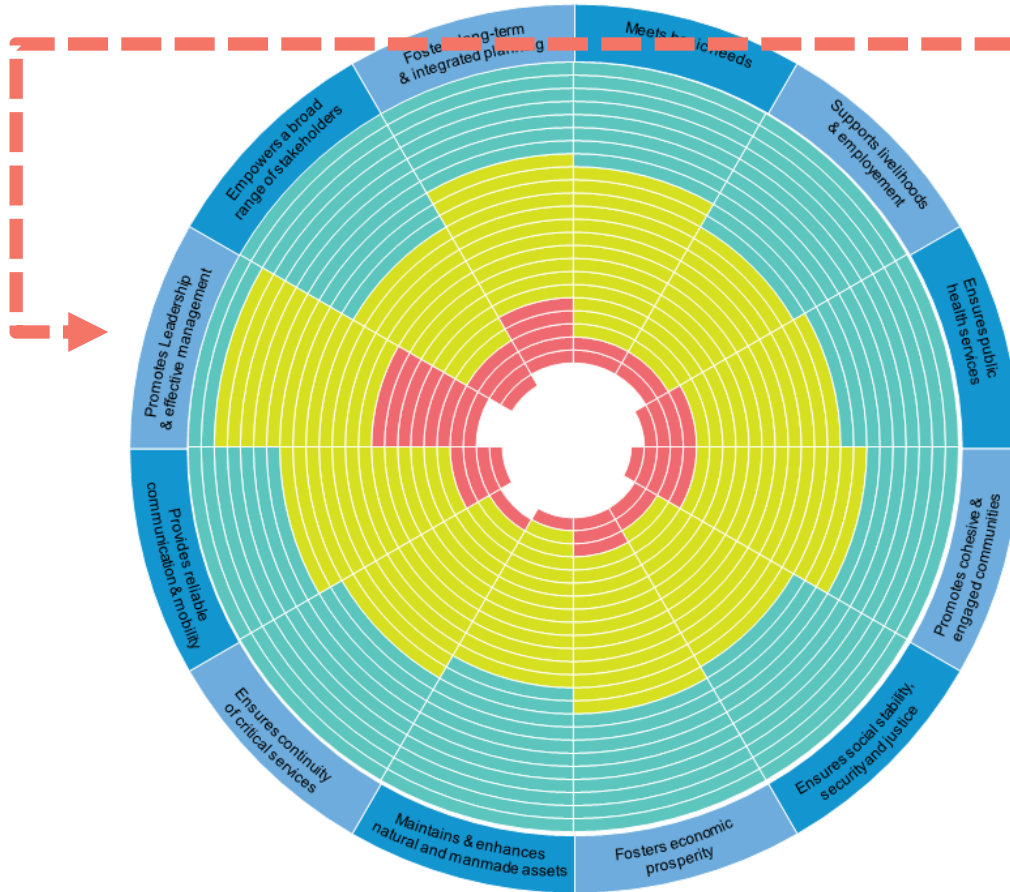


# Resilience Perceptions

Results from Citywide Resilience on-line survey

## February 2015 Survey

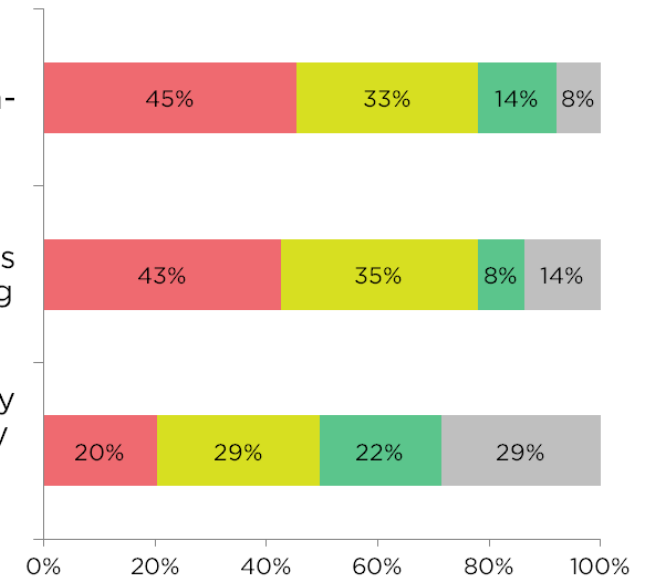
### Promotes leadership and effective management



Transparent, inclusive and integrated government decision-making and leadership

Collaboration between all actors involved in city decision-making

Redundant capacity and flexibility in city leadership to resourcefully and effectively manage emergencies



N=398

■ Need to do better ■ Doing well, but can improve ■ Area of strength ■ Unknown

# Resilience Perceptions

Results from Citywide Resilience on-line survey

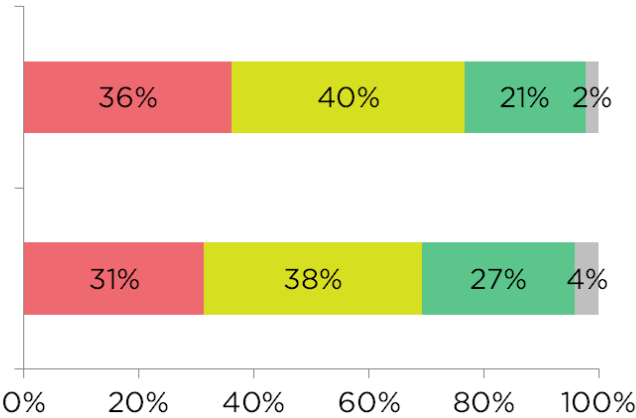
## February 2015 Survey



### Promotes cohesive and engaged communities

Integrated local identity and culture, in which all citizens feel a sense of belonging in the city

Resourceful, integrated and inclusive engagement of civil society within the city

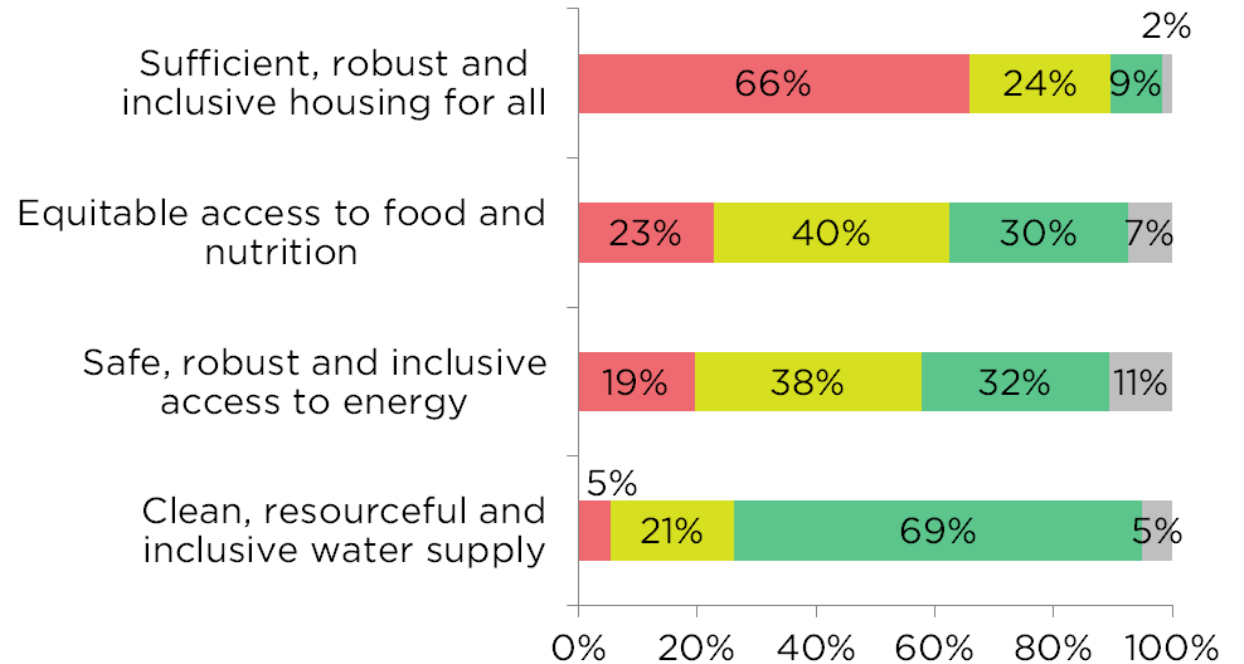


# Resilience Perceptions

Results from Citywide Resilience on-line survey

## February 2015 Survey

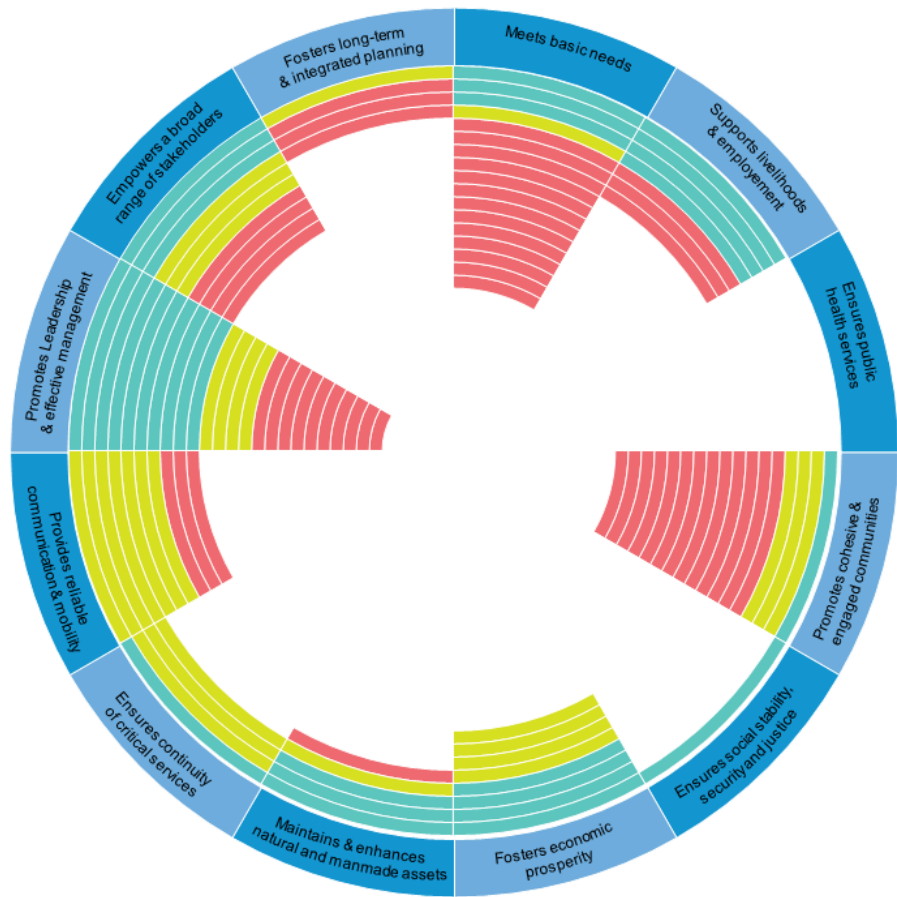
### Meets basic needs



# Resilience Perceptions

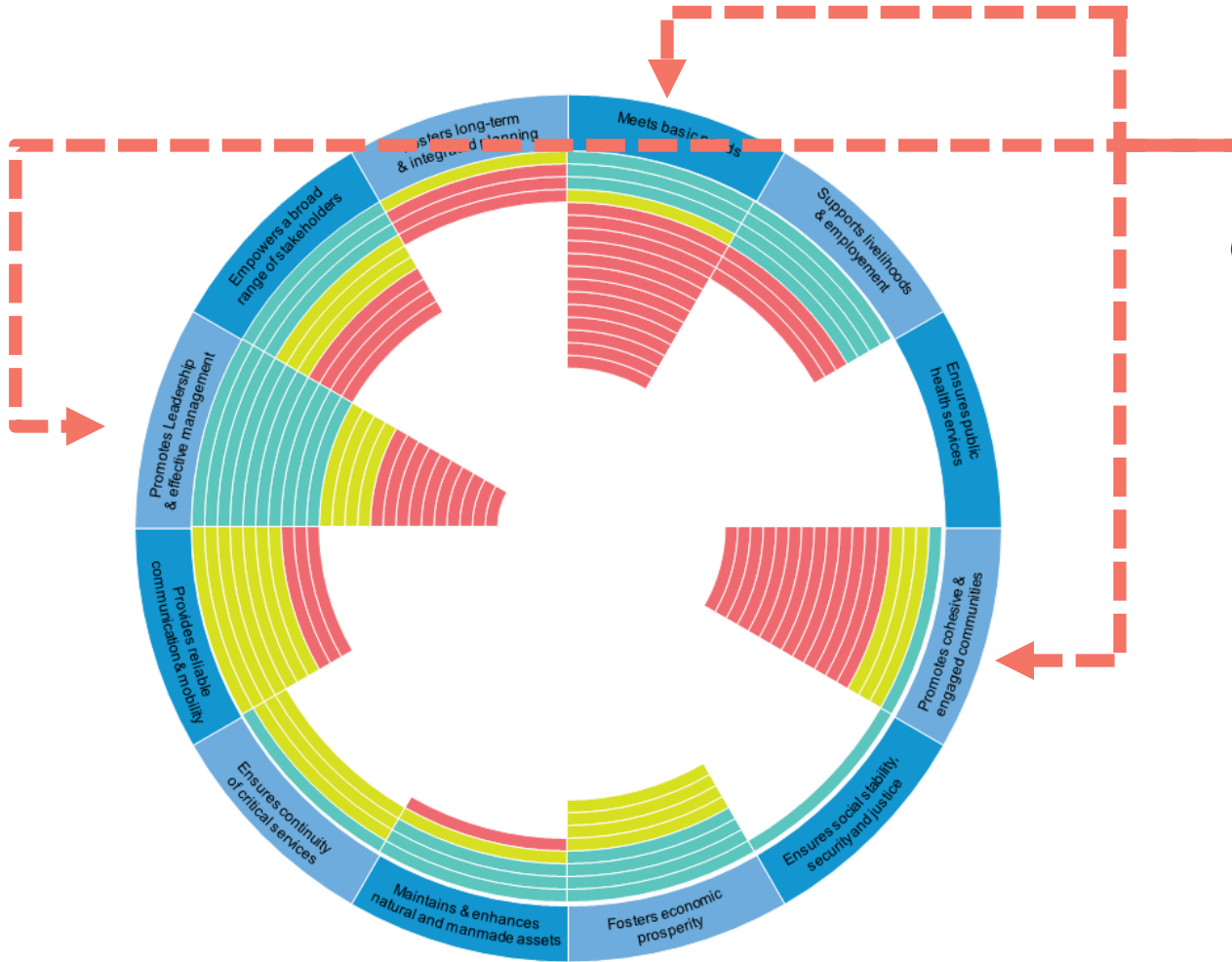
Results from March 17, 2015 perceptions workshop

## March 2015 Mini-workshops



# Resilience Perceptions

Results from March 17, 2015 perceptions workshop



## March 2015 Mini-workshops

**Workshop validated survey findings of city's weaknesses.**

(Participants were not shown survey results until after the exercise.)



■ Need to do better ■ Doing well, but can improve ■ Area of strength ■ Unknown

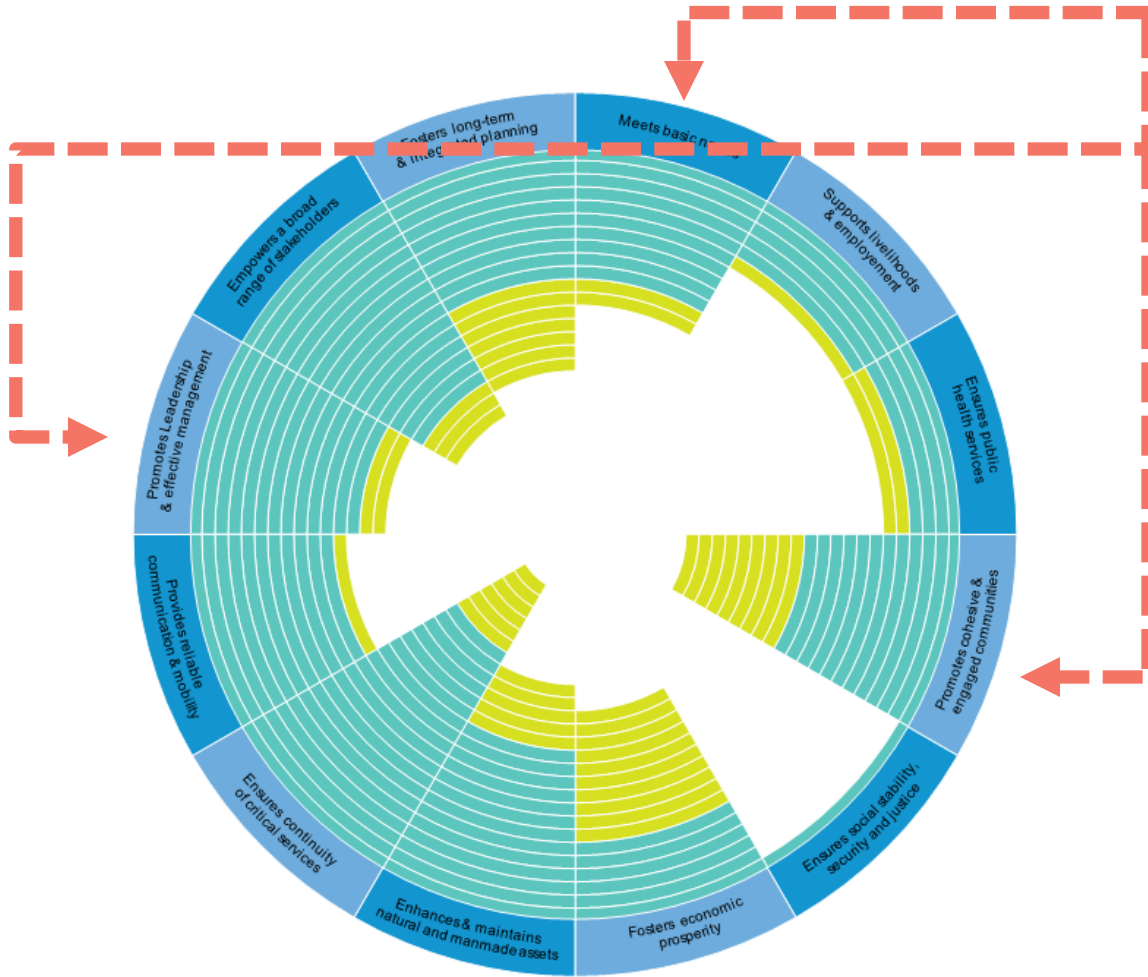
# Resilience Actions

Results from March 17, 2015 perceptions workshop

## March 2015 Mini-workshops

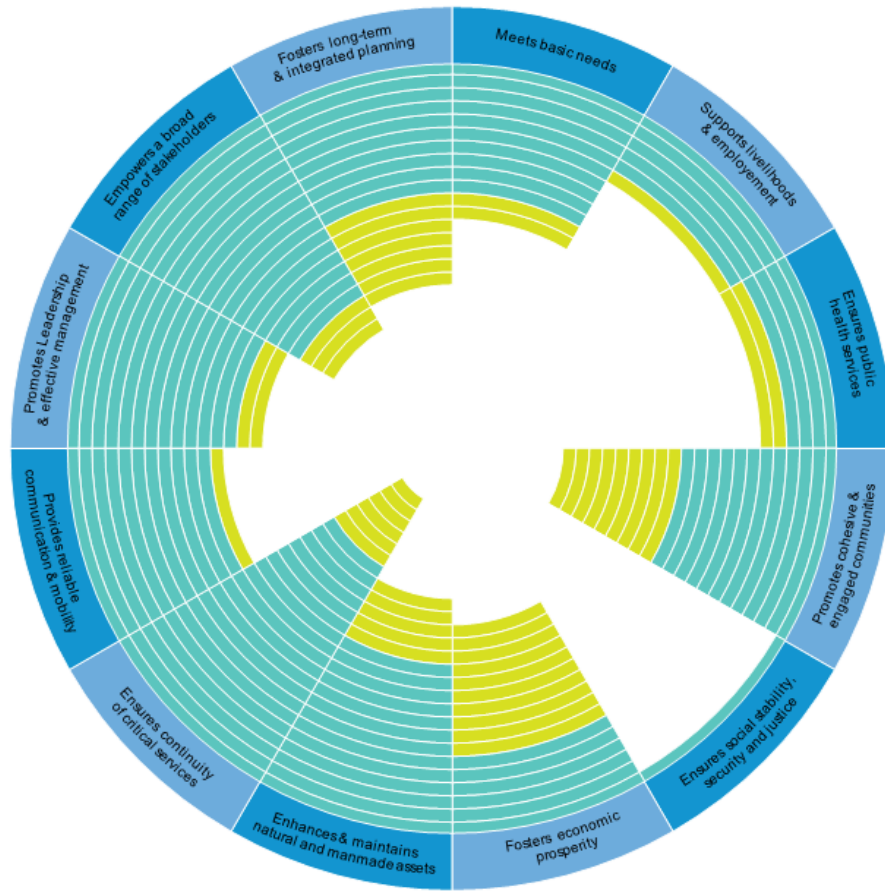
Actions exist in categories identified as particular weaknesses in the survey and mini-workshop:

- 1) Housing affordability
- 2) Government transparency
- 3) Community engagement and feedback integration



# Resilience Actions

Results from March 17, 2015 perceptions workshop



## March 2015 Mini-workshops

But these initiatives do not necessarily relate to all of the categories within the driver, nor do they reflect the amount of city resources behind these actions.

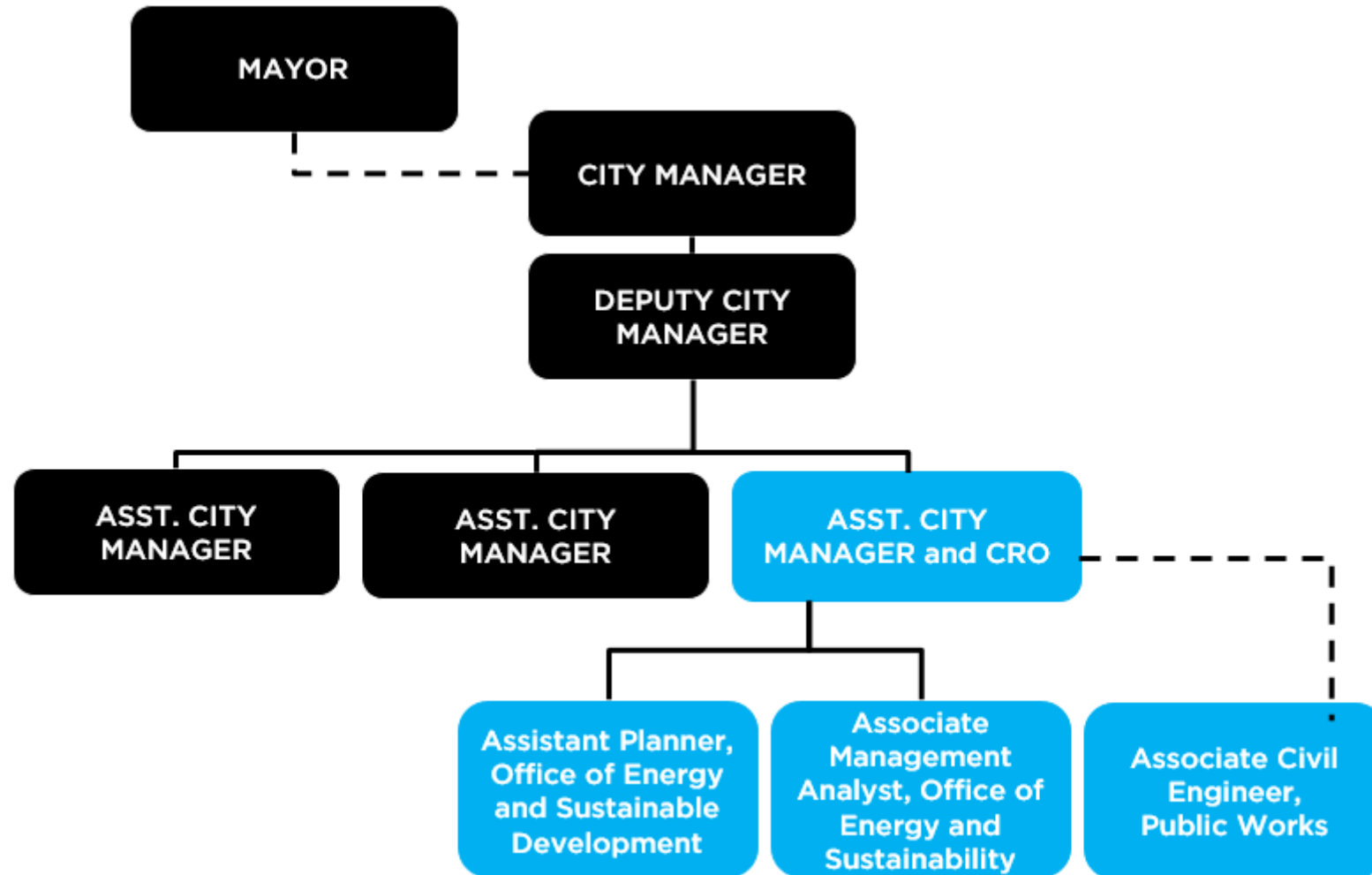
For example, many actions “Promoting Cohesive and Engaged Communities” are new or in the process of being rethought (Neighborhood Liaison, Code for America)



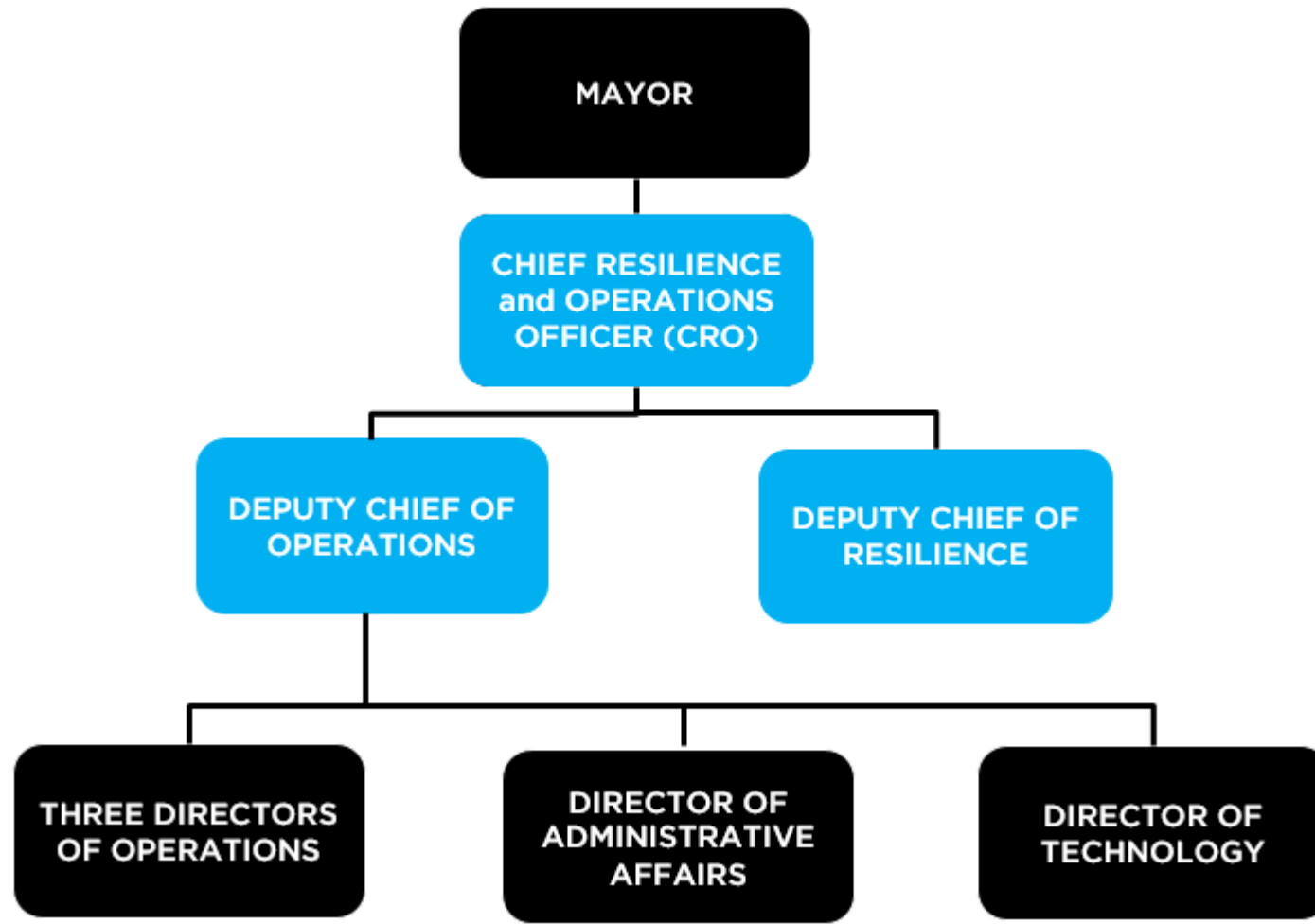
# Roles & Responsibilities

Role	Responsibilities
<i>Chief Resilience Officer</i>	<i>Overall project director for delivering the city's Resilience Strategy</i>
<i>Working Team (if relevant)</i>	<i>Supporting the CRO's day to day activities</i>
<i>Resilience Steering Committee</i>	<i>Providing an advisory, decision-making, or other role as defined by the City Team</i>
<i>Working Groups</i>	<i>Supporting the CRO's key activities</i>
<i>Strategy Partner</i>	<i>Supporting the CRO in project management, providing technical expertise and other guidance.</i>
<i>100RC Relationship Manager</i>	<i>Supporting the CRO with defined 100RC resources</i>

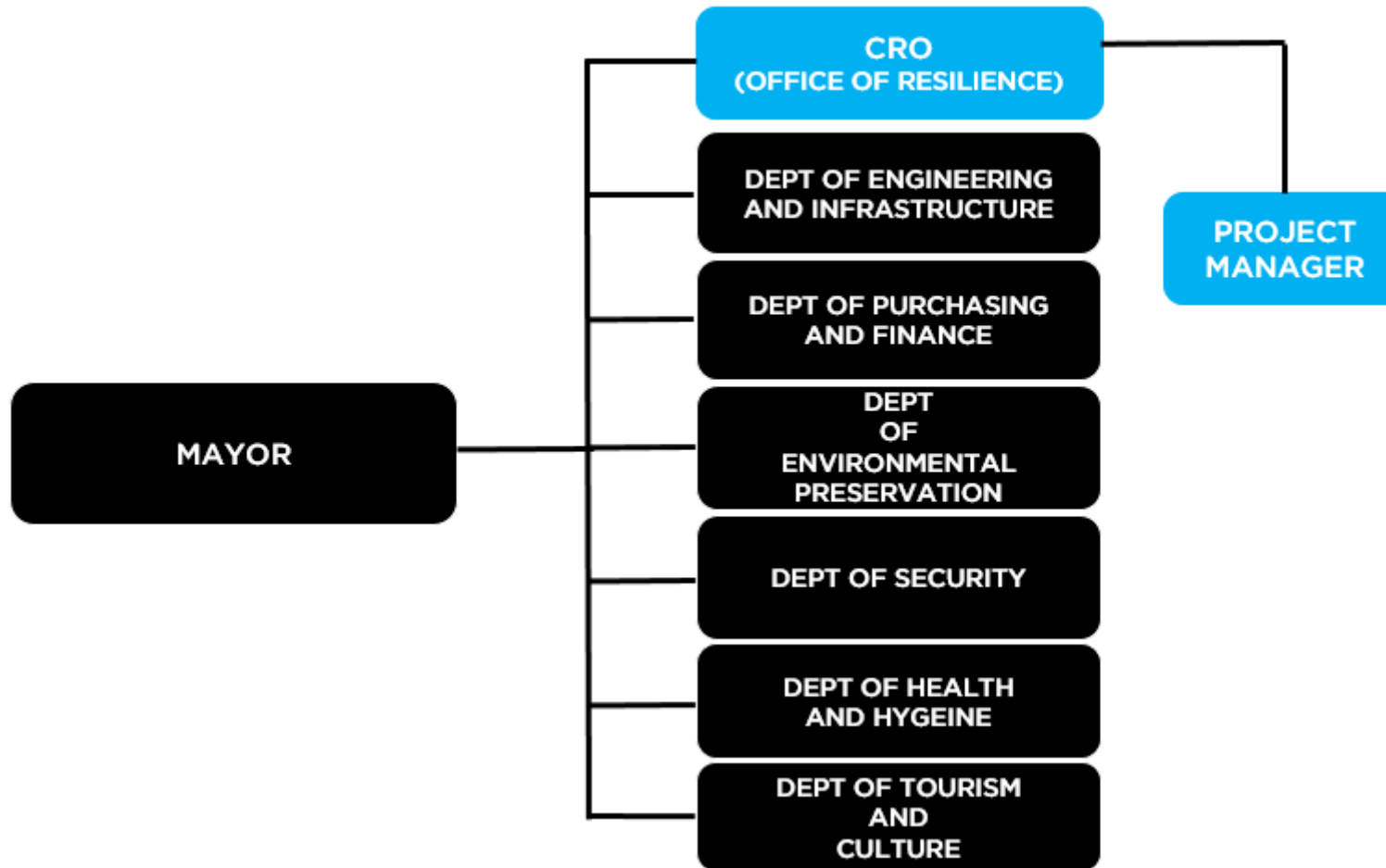
## BERKELEY, CA



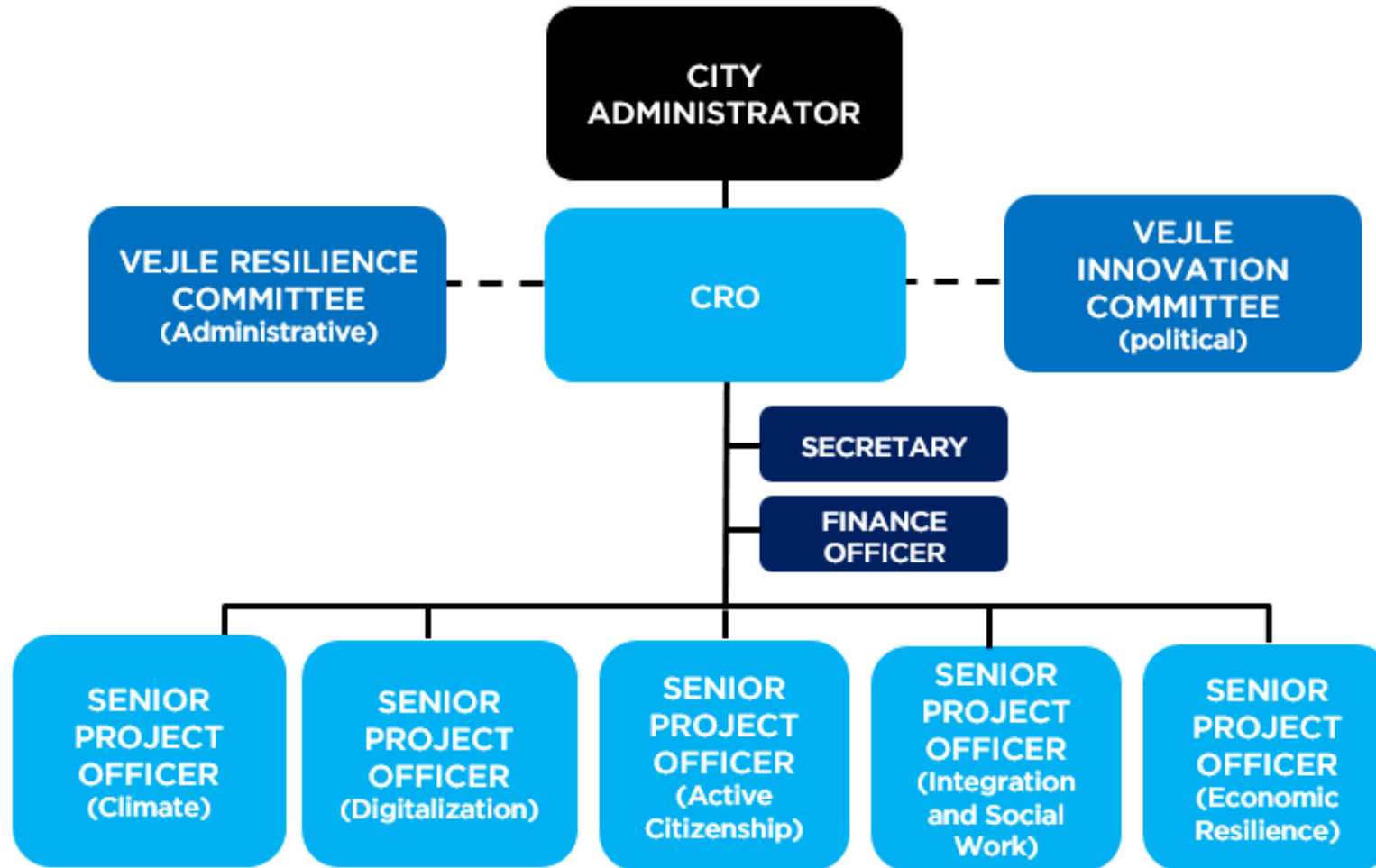
## RIO DE JANEIRO



## BYBLOS



## VEJLE





# Greg Guibert

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303.441.1924